

## Claims

### [Claim 1]

A device for assisting with work planning, the device comprising:

a first planning assistance processing component configured to, based on first factors determining a space occupation aspect of a building and an arrangement aspect of a plurality of candidate carriage points, the first factors being specified through an input interface, generate a primary work situation image indicating the space occupation aspect of the building and the arrangement aspect of the plurality of candidate carriage points and cause the primary work situation image to be output to an output interface; and

a second planning assistance processing component configured to, based on second factors determining an arrangement aspect and specifications of a crane, the second factors being specified through the input interface, in addition to the first factors, recognize candidate carriage points to which it is possible to carry a material by the crane while avoiding interference of each of the crane and the material with the building as first carriage points, generate a secondary work situation image, the secondary work situation image being the primary work situation image with the first carriage points and second carriage points, which are candidate carriage points other than the first carriage points, being expressed in an identifiable form, and cause the secondary work situation image to be output to the output interface.

### [Claim 2]

The device for assisting with work planning according to claim 1, wherein

the second planning assistance processing component recognizes the first carriage points based on the first factors, the second factors, and external factors that affect a situation of carriage of the material by the crane.

### [Claim 3]

The device for assisting with work planning according to claim 2, wherein

the second planning assistance processing component recognizes a time series of the first carriage points based on a time series of the external factors, generates the secondary work situation image, the secondary work situation image being the primary

work situation image with the first carriage points and the second carriage points being expressed in a time series in the identifiable form, and causes the secondary work situation image to be output to the output interface.

[Claim 4]

The device for assisting with work planning according to any one of claims 1 to 3, wherein

the second planning assistance processing component recognizes the time series of the first carriage points based on a time series of the second factors, generates the secondary work situation image, the secondary work situation image being the primary work situation image with the first carriage points and the second carriage points being expressed in a time series in the identifiable form, and causes the secondary work situation image to be output to the output interface.

[Claim 5]

The device for assisting with work planning according to any one of claims 1 to 4, wherein

the first planning assistance processing component generates, based on the time series of the first factors, the primary work situation image indicating a time series of each of the space occupation aspect of the building and the arrangement aspect of the plurality of candidate carriage points and causes the primary work situation image to be output to the output interface; and

the second planning assistance processing component recognizes a time series of the first carriage points based on the time series of the first factors, generates the secondary work situation image, the secondary work situation image being the primary work situation image with the first carriage points and the second carriage points being expressed in a time series in the identifiable form, and causes the secondary work situation image to be output to the output interface.

[Claim 6]

The device for assisting with work planning according to any one of claims 1 to 5, wherein

for each of the first carriage points, the second planning assistance processing component causes material attribute information indicating an attribute of materials that can be carried by the crane to be output to the output interface in an identifiable form according to a difference in the attribute, based on the second factors.

[Claim 7]

The device for assisting with work planning according to any one of claims 1 to 6, wherein

the second planning assistance processing component partially restricts an aspect of specifying the second factors through the input interface, based on the first factors further determining the attribute of the material.